Find a percentage of a given amount using a calculator

1 Complete the calculations.

Show your working.

a) 36% of £240 = $\boxed{£86.40}$

b) 79% of £56 = $\boxed{£44.24}$

2 Tick the calculation that cannot be used to find 83% of £542

542 ÷ 100 × 83	83 × 542 ÷ 100

542 ÷ 83 × 100 ✓	0.83 × 542

Explain your answer.

% means per 100 so you need to divide by 100 not multiply.

3 Write <, > or = to make the statement correct.

84% of 50 $\boxed{=}$ 50% of 84

Explain your answer.

They're both equal to 42

4 In 2011, the population of Leeds was 474,632

The population of Leeds has now increased.

A web page states, "The population of Leeds has increased by 17%."

Is it possible for the population to have increased by **exactly** 17%?

Explain your answer.

No, 17% of 474,632 = 80,687.44 and you can't have 0.44 of a person.

5 Calculate 37% of 2 m.

Give your answer in centimetres.

$\boxed{74}$ cm

6 Dani is buying a bike.

She finds the same bike in two different shops.

Bike World
£106
Price does not include VAT

Fast Bikes
£125.99
Price includes VAT

The rate of VAT is 20%.

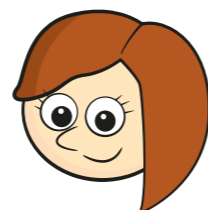In which shop would it be cheaper to buy the bike? Show your working.

Fast Bikes

7 Rosie and Jack are calculating 99% of £250

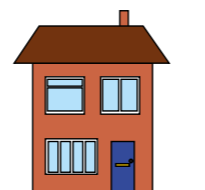Jack: You need to use a calculator for this as they are large numbers.

Rosie: I think it's possible to use a mental method for this.

Which mental method might Rosie use?

8 In 2007, the value of a house was £119,995

From 2007 to 2018, house prices decreased by 9.4%.

How much has the value of the house decreased by?

£11,279·53

9 A car salesman earns commission for each car he sells.

The commission is a percentage of his monthly salary, based on the values of the cars he sells.

Here is a table of his commissions.

Car value	Commission
< £15,000	2.3% of salary
≥ £15,000	5.7% of salary

His monthly base salary is £1,208

a) How much commission does he earn from selling 1 car for less than £15,000?

£27·78

b) How much commission does he earn for selling 6 cars, each for less than £15,000?

£166·70

c) How much commission does he earn for selling 7 cars, each for more than £15,000?

£481·99

d) In January, he sells 6 cars that cost less than £15,000 and 7 cars that cost more than £15,000

How much does he get paid that month?

He gets paid £1,856.69

10 Mr Jones wants to put £850 into a bank account.

He looks at the interest rates from two different banks.

Bank Central

First year:
3% of the original amount deposited

Second year:
1.5% of the total amount at the end of year 1

Bank Happy

First year:
0.5% of the original amount deposited

Second year:
4% of the total amount at the end of year 1

At the end of 2 years he wants to have made as much money as possible.

Which bank should Mr Jones use? Bank Central

Explain your answer.

Bank Central: £888.63

Bank Happy: £888.42